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PHB 34358  
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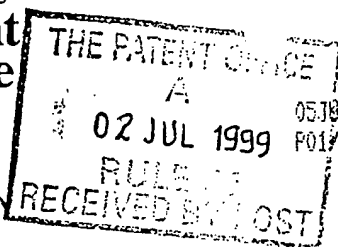
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Dated

29 DEC 1999

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The Patent Office  
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1. Your reference

PHB34358

2. Patent application number  
(The Patent Office will fill in this part)

9915571.5

02 JUL 1999

3. Full name, address and postcode of the or of  
each applicant (underline all surnames)

KONINKLIJKE PHILIPS ELECTRONICS N.V.  
GROENEWOUDSEWEG 1  
5621 BA EINDHOVEN  
THE NETHERLANDS

Patents ADP Number (*if you know it*)If the applicant is a corporate body, give the  
country/state of its incorporation

THE NETHERLANDS

7419294001

4. Title of the invention

RADIO COMMUNICATION SYSTEM

5. Name of your agent (*if you have one*)  
"Address for service" in the United Kingdom  
to which all correspondence should be sent  
(*including the postcode*)

Kevin James SCOTT  
Philips Corporate Intellectual Property  
Cross Oak Lane  
Redhill  
Surrey RH1 5HA

Patents ADP number (*if you know it*)6. If you are declaring priority from one or more  
earlier patent applications, give the country  
and the date of filing of the or of each of these  
earlier applications and (*if you know it*) the or  
each application number

Country

Priority Application number  
(*if you know it*)Date of filing  
(*day/month/year*)

GB

9912289.7

26.05.99

7. If this application is divided or otherwise  
derived from an earlier UK application, give  
the number and the filing date of the earlier  
application

Number of earlier application

Date of filing  
(*day/month/year*)8. Is a statement of inventorship and of right to  
grant of a patent required in support of this  
request? (*Answer "Yes" if:*

YES

- a) any applicant named in part 3 is not an inventor, or
  - b) there is an inventor who is not named as an  
applicant, or
  - c) any named applicant is a corporate body.
- See note (d))

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| Description | 9(x2) /     |
| Claims(s)   | 4(x2) /     |
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Priority Documents

Translations of priority documents  
Statement of inventorship and right  
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Request for preliminary examination and  
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Any other documents  
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11. I/We request the grant of a patent on the basis of this application.

Signature

*KSJ*

Date

1<sup>st</sup> July 1999

12. Name and daytime telephone number of person to contact in the United Kingdom

01293 815281

(Kevin J. Scott)

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## DESCRIPTION

## RADIO COMMUNICATION SYSTEM

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The present invention relates to a radio communication system and further relates to a secondary station for use in such a system and to a method of operating such a system. While the present specification describes a system with particular reference to the emerging Universal Mobile Telecommunication  
10 System (UMTS), it is to be understood that such techniques are equally applicable to use in other mobile radio systems.

There are two basic types of communication required between a Base Station (BS) and a Mobile Station (MS) in a radio communication system. The  
15 first is user traffic, for example speech or packet data. The second is control information, required to set and monitor various parameters of the transmission channel to enable the BS and MS to exchange the required user traffic.

In many communication systems one of the functions of the control  
20 information is to enable power control. Power control of signals transmitted to the BS from a MS is required so that the BS receives signals from different MS at approximately the same power level, while minimising the transmission power required by each MS. Power control of signals transmitted by the BS to a MS is required so that the MS receives signals from the BS with a low error  
25 ~~rate while minimising transmission power, to reduce interference with other~~  
cells and radio systems. In a two-way radio communication system power control may be operated in a closed or open loop manner. In a closed loop system the MS determines the required changes in the power of transmissions from the BS and signals these changes to the BS, and vice versa. In an open  
30 loop system, which may be used in a TDD system, the MS measures the received signal from the BS and uses this measurement to determine the required changes in the transmission power.